Classifieds

DISCOVERY!

The National Student Research Group of the AADR-An Introduction

James M. Rogér, Julie A Javarone, Erin L. Ealba, Michael R. Markiewicz and Anthony B. Morlandt

The authors introduce and describe the missions and goals, recent activities, and future initiatives of the National Student Research Group of the AADR.

CRITICAL REVIEWS IN ORAL BIOLOGY & MEDICINE

Hereditary Dentin Defects

J.-W. Kim and J.P. Simmer

The authors discuss the development of the dentin extracellular matrix in the context of its evolution, and discuss the phenotypes and clinical classifications of isolated hereditary defects of tooth dentin in the context of recent genetic data respecting their genetic etiologies.

Obesity, Inflammation, and Periodontal Disease

N. Pischon, N. Heng, J. -P. Bernimoulin, B.-M. Kleber, S.N. Willich, and T. Pischon

The authors provide an overview of the definition and assessment of obesity and related chronic diseases and complications that may be important in the periodontist's office.

CLINICAL

Effectiveness of Fluoride in Preventing Caries in Adults

S.O. Griffin, E. Regnier, PM. Griffin, and V. Huntley

Fluoride prevents caries in adults of all ages.

Gene Polymorphisms and the Prevalence of Key Periodontal Pathogens

L. Nibali, D.R. Ready, M. Parkar, P.M. Brett, M. Wilson, M.S. Tonetti, and G.S. Griffiths

Complex interactions between the microbiota and the host genome may be the basis of susceptibility to aggressive periodontitis.
Sequence of Oral Bacterial Co-adhesion and Non-contact Brushing

H.C. van der Mei, M. Rustema-Abbing, G.M. Bruinsma, B. Gottenbos, and H.J. Busscher

At contact, rotary and sonic brushing performed equally well in bacterial removal, while at 4 mm both lost some efficacy.

BIOMATERIALS & BIOENGINEERING

Self-assembling Peptide Scaffolds Promote Enamel Remineralization


Self-assembling peptides may be useful in the modulation of mineral behavior during in situ dental tissue engineering.

Protection Offered by Root-surface Restorative Materials against Biofilm Challenge

H.K. Yip, J. Guo, and W.H.S. Wong

Glass-ionomer restoratives conferred a preventive effect on root surfaces against initial cariogenic challenge with mixed-species oral biofilm without therapeutic intervention.

Zymographic Analysis and Characterization of MMP-2 and -9 Forms in Human Sound Dentin


Using new acidic demineralization and enhanced protein recovery procedures, the authors identified, for the first time, several gelatinolytic matrix metalloproteinases in human dentin matrix, as well as several forms of both zymogen and activated MMP-9 in dentin extracts.

In vitro Evaluation of Corrosion and Cytotoxicity of Orthodontic Brackets

M.T Costa, M.A. Lenza, C.S. Gosch, I. Costa, and F. Ribeiro-Dias

Low-nickel stainless steel presents better in vitro biocompatibility than AISI 304 stainless steel brackets.

BIOLOGICAL

Arg-gingipain A DNA Vaccine Prevents Alveolar Bone loss in Mice

K. Miyachi, K. Ishihara, R. Kimizuka, and K. Okuda

The authors describe a new approach to the clinical prevention of periodontal disease using a combination of rgpA DNA vaccine and the HVJ envelope vector system.

Effect of Aqueous Ozone on the NF-κB System


The authors establish a condition under which aqueous ozone exerts inhibitory effects on the NF-κB system, suggesting that it has an anti-inflammatory capacity.

Matrix Metalloproteinase-3 Differences in Oral and Skin Fibroblasts


Increased MMP-3 production by oral fibroblasts may underlie the differences in wound-healing outcome seen in skin and oral mucosa.
Mouse Molar Dentin Size/Shape is Dependent on Growth Hormone Status


This is the first morphometric study of dentin in mouse models either expressing a growth hormone transgene or lacking the expression of a growth hormone receptor gene.

Hard Tissue Formation in Subcutaneously Transplanted Rat Dental Pulp


Pulp cells are able to form mineralized hard tissue in the absence of dentinal growth factors.

Effects of COX-2 Inhibitor in Temporomandibular Joint Acute Inflammation

TC.B Schütz, M.L. Andersen, and S. Tufik

The authors suggest the involvement of cyc10-oxygenase-2 enzyme in acute inflammation of the TMJ, specifically in REM sleep.